Urban Agriculture Land Use Code Amendments
Director's Report and Recommendations

INTRODUCTION

Local food systems were recognized as an important component of the City of Seattle's leadership on sustainability when City Council adopted Resolution 31019 on April 28, 2008. The resolution includes the goal of creating a policy framework to strengthen Seattle's food system sustainability and security. The resolution also lays out a series of steps to reduce hunger and encourage the production and consumption of more locally grown food. The resolution specifically tasked City departments to assess their respective policies and planning processes to ensure support for food system planning. In response to Council's resolution the Department of Planning and Development (DPD) is proposing amendments to the City's Land Use Code to:

1. Encourage the inclusion of small and mid-size grocery stores (3,000-20,000 sq. ft.) in Neighborhood Commercial (NC) and Commercial (C) zones.
2. Add code provisions that support urban agriculture and to identify and eliminate code requirements that may conflict with urban agriculture and other forms of gardening.
3. Develop incentives that encourage the incorporation of food gardens into multifamily development.

As part of the response to Resolution 31019, the Department of Neighborhoods released the draft Food System Policy Plan (FSPP) in January, 2010. While Seattle's Comprehensive Plan provides the overarching policy basis for the recommended code changes, the FSPP provides background information on the current conditions of Seattle's food system, and outlines the inter-departmental approach to planning and policy development. The FSPP can be found online at www.seattle.gov/urbanagriculture.

Urban agriculture is a type of infill development that fits into Seattle, and the regions, larger growth management strategy by adding a missing element of livable communities and stimulating small-scale economic development. Horticulture uses are already permitted in the City's commercial zones, and expanding the ability to grow and sell food is compatible with uses already permitted in residential zones (home occupations, home gardens, etc.) There is tremendous opportunity to develop local sources of healthy food without competing for housing by turning existing lawn and garden space into productive agricultural plots. Small-scale urban agriculture can help create livable, walkable and sustainable communities, and implement City goals of sustainability and economic development.

This Director's Report focuses exclusively on proposals for creating a more secure and sustainable food system in Seattle by removing code barriers to urban agriculture and identifying incentives to produce and distribute more locally grown food. The following table provides an overview of the recommendations:

DPD Proposals in Response to Resolution 31019		
Direction from Resolution 31019	**Findings**	**Recommended Actions**
1. *Review the Land Use Code provisions to ensure that the inclusion of small and mid-size grocery stores (3,000-20,000 sq. ft) in NC and C zones is encouraged.*	Feedback from grocery developers indicates that further work could be done to encourage grocery store development, especially at sizes 20,000 sq. ft and less (see recommended actions). Small to mid-sized grocery stores (defined as "Retail sales, multipurpose") are allowed in all NC and C zones. Size-of-use limits in the zones that apply to small business districts favor small and mid-sized stores over larger ones.	1. A combination of tax and zoning/development incentives would be the best approach, and would involve review and input from other City departments. Proposed for further work in 2010. 2. For clarification, and to streamline the permitting process in commercial zones, farmers' markets have been added as an example of a multipurpose retail use, consistent with the treatment of grocery stores.
2. *Review the Land Use Code to identify codes that support or conflict with the goal of potential future development of urban agriculture and market gardening.*	Existing code barriers to the production and distribution of urban agriculture, include: 1. Limitations or prohibitions for growing and selling local food in most zones. 2. Unclear definitions for key urban agriculture terms. Feedback from stakeholder groups indicates the number of chickens that are allowed per lot is insufficient to consistently produce enough eggs to feed a family.	DPD proposes changes to the Land Use Code to address these findings as further detailed in this report.
3. *Analyze the potential of developing new standards or incentive programs that encourage incorporating food gardens into multifamily developments.*	Several opportunities to encourage food gardens in multifamily and mixed-use development were included in legislation that passed in 2009 or is pending in 2010. 1. In 2009 a bonus for food production was added to	1. The application of Green Factor in other zones, including Lowrise and Industrial Commercial (IC) in urban villages/centers is pending. 2. DPD proposes changes to the Land Use Code to

	the Green Factor landscaping requirements for Midrise, Highrise, and commercial zones. 2. In 2009 Council adopted the Living Building Pilot that promotes green development that includes uses such as urban agriculture.	promote greenhouses used for food production on the roofs of buildings in multifamily and commercial zones.
3. Additional Recommendations	Seattle has a unique history of farming that is all but lost in the city. One rare situation involves a large family horse farm that has survived in Seattle for nearly 100 years. To date, the farm has mostly been recreationally used by family members; however, given the rising value of land, it is increasingly difficult for a farm to continue to operate without commercial activity.	DPD proposes Code changes to allow existing commercial horse farms to continue to operate in a residential zone.

BACKGROUND

Food security is defined as "access to healthful, affordable, and culturally appropriate foods at all times,"[i] and urban agriculture is an important solution for people facing food insecurity to gain access to fresh, affordable, nutritious food. For built-out cities like Seattle the challenges for achieving food system sustainability and security include:

- Urban neighborhoods that lack a reliable supply of healthy, nutritious and culturally appropriate food.
- Reliance on a conventional, food distribution system that does little to encourage locally grown food.
- High real estate values that put the cost of land for farming or community gardens out of reach for most citizens.

Seattle is not alone in recognizing the need for change in its food system; cities across the country are grappling with issues such as health, diet-related disease, security concerns and climate change that are having greater impacts on people and government services. The necessity of developing responses to these issues is recognized in many studies, with statistics that include the following:

- In the United States, produce found in the average grocery store travels nearly 1,500 miles to reach its destined plate, and over 20% of this country's fresh fruits and vegetables are imported annually.[ii]
- Between 12.5 and 19.7 percent of Seattle residents experience some degree of food insecurity. Approximately 63,000 Seattleites can be classified as food insecure*, and 31,500 as hungry.[iii]
- Obesity rates in the U.S. have increased dramatically over the past 30 years, and obesity is now epidemic in the U.S. Data for 2003-2004 and 2005-2005 indicated that approximately two thirds of U.S. adults and one fifth of U.S. children were either obese or overweight.[iv]
- Many experts consider a hungry world to be a dangerous place. Some believe that to prepare for emergencies, every community should be able to produce or supply at least a third of the food required by its residents; current statistics indicate that less than 5% is produced and consumed with a local system.[v]

The responses to issues such as those listed above are many; some are rooted in progressive growth management and land use planning. For example, cities (and regions) can protect valuable agricultural land through increased development in existing urban areas, as promoted by Washington State's Growth Management Act (GMA). Promoting a form of urban agriculture need not conflict with the urban growth strategy fostered by the GMA; the city will not likely become an agricultural utopia as Seattle will continue to experience and support urban development.

Urban agriculture will not replace Seattle's ability to provide for housing development in an urban area; instead it should be viewed as an accessory use that's highly compatible with the character of residential neighborhoods. It is possible that Seattle can comfortably accommodate a smaller, more urban form of agricultural use that compliments its growth strategy. A 2009 article in the magazine *Urban Land* suggests that the individual residence is perhaps the scale where the greatest impact on urban agriculture can be made.[vi] Although the article classifies lots 5,000-10,000 sq. ft as "the low density nature of suburbia," it is important to note that nearly 65% of Seattle is zoned single-family, with 67% of single-family lots 5,000 sq. ft or larger. This land is highly suitable for expanding urban agriculture because it is already irrigated and maintained and, in response to community feedback, there seems to be a genuine interest in allowing people to grow and sell produce from their land.

By removing code barriers there is tremendous opportunity for urban agriculture in residential yards, commercial/industrial rooftops, and in open space. Although food policy has not often been part of current planning processes that has not always been the case. The "Victory Gardens" planted during World War II are still part of our recent memory; a resurrection of the Victory Garden model is happening with the current Obama Administration. The USDA estimates that the gardens planted by U.S. citizens reached their heyday in 1943 when 20 million Victory Gardens produced 40% of America's fresh vegetables.[vii] During the energy crisis in the 1970s when President Gerald Ford urged people to plant Whip Inflation Now, or WIN, gardens, 49 percent of households grew vegetable gardens.[viii]

*****According to the *Sound Food Report*, food insecurity is defined as food insecurity is defined as "the limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways."

Victory and WIN Gardens are proof that urban agriculture, even practiced on a small scale, can bring healthy, nutritious food into dense, urban areas. Where space is not available, gardening can be practiced on rooftops, vertical farming, or in containers. The benefits of local food are many, including:

- Food production close to, or in cities, ensures that produce is as fresh as possible, and therefore likely to have a higher nutrient content compared to food that has been transported over great distances.[ix]
- Urban farming can help build community relationships through shared gardening space, reestablishing connections to food sources, and building relationships between farmer and consumer.
- Incentives to produce more food locally for sale can help reduce poverty and social inequity by allowing residents of lower-income areas to raise and sell crops on currently unused land.[x]
- Urban farming has the potential to reduce greenhouse gas emissions from long-distance food hauling.
- Locally produced food affords Seattle and the Puget Sound region a degree of self-sufficiency by ensuring a reliable source of food in an emergency.

The recommended code changes outlined in this Director's Report would expand opportunities for people to feed themselves, their families, and their neighbors. Relatively simple code changes would allow different types of agricultural activity, promote more productive use of both public and private open space, and increase the capacity of underused areas such as rooftops to provide food. More options for where and how locally grown food can be produced, shared, and sold is an important first step toward the long-term sustainability and security of Seattle's food system.

COMPATABILITY WITH THE COMPREHENSIVE PLAN

Recommendations from the FSPP are closely aligned with Comprehensive Plan goals and policies related to environmental sustainability, climate protection, economic development and social justice. The recommended code changes are consistent with these policies including the following:

<u>Urban Village (UV) Element</u>

UV2 Promote conditions that support healthy neighborhoods throughout the city, including those conducive to helping mixed-use urban village communities thrive, such as focused transportation demand management strategies, vital business districts, a range of housing choices, a range of park and open space facilities, and investment and reinvestment in neighborhoods.

UVG9 Use limited land resources more efficiently and pursue a development pattern that is more economically sound, by encouraging infill development on vacant and underutilized sites, particularly within urban villages.

UVG38 Provide safe and welcoming places for the people of Seattle to play, learn, contemplate, and build community. Provide healthy spaces for children and their families to play; for more passive activities such as strolling, sitting, viewing, picnicking, public gatherings, and enjoying the natural environment; and for active uses such as community gardening, competitive sports, and running.

UV53. Direct efforts to expand the open space network according to the following considerations:

2. Types of open space acquisitions and facility development:
   a. Village open space sites, urban center indoor recreation facilities, village commons sites, and community gardens;

UV57 Promote inter-agency and intergovernmental cooperation to expand community gardening opportunities, and include P-Patch community gardening among priorities for use of City surplus property.

Land Use (LU) Element

LUG3 Encourage, through the City's land use regulations, development that protects the public's health and maintains environmental quality.

LU8 Allow or prohibit uses in each zone based on the intended function of the zone and the impacts the uses can be expected to have on the zone and the surrounding area.

LU9 Treat as conditional uses those activities having potentially severe impacts either because of the character of the surrounding area, or because the cumulative impacts of more than one such activity would be incompatible with the other permitted uses in the area.

LU12 Limit non-residential uses in residential zones to those that are necessary to the function of residential neighborhoods, are permitted under special circumstances, such as in historic structures, or are highly compatible with residential activity

Economic Development (ED) Element

ED19 Support employability development and entry-level and career employment efforts for low-income youth and adults, people of color, women, individuals with disabilities and the homeless.

Human Development (HD) Element

HDG3 Strive to alleviate the impacts of poverty, low income and conditions that make people, especially children and older adults, vulnerable.

HD11 Encourage coordinated service delivery for food, housing health care, and other basic necessities of life to promote long-term self-reliance for vulnerable populations

HD13 Encourage public and private efforts that support food banks and nutrition programs, especially to meet the nutritional needs of infants, children and the elderly, and other vulnerable populations.

Cultural Resource (CR) Element

CR4 Continue Seattle's long tradition of providing a rich variety of public open spaces, community gardens, and public facilities to provide residents with recreational and cultural opportunities, promote environmental stewardship and attract desirable economic development.

Environment (E) Element

EG7 To control the impact of climate change globally and locally, reduce emissions of carbon dioxide and other climate-changing greenhouse gases in Seattle by 30 percent from 1990 levels by 2024, and by 80 percent from 1990 levels by 2050.

In pending Comprehensive Plan amendments there is one recommendation for the North Rainier Valley neighborhood that is particularly relevant:

NR-P25 Support local agriculture and access to locally grown food through public mechanisms such as P-Patches and the Cultivating Communities program, as well as nonprofit and private mechanisms including farmers markets and on-site landscaping."

RESEARCH AND ANALYSIS

The purpose of this initiative is to identify land use regulations that may be inhibiting urban agriculture, remove those barriers, and put regulations in place that can promote urban agriculture. Code barriers can be both overt and intentional (not allowing specific uses to be permitted), or the code can act as a barrier due to an omission and the code therefore lacks clarity. Seattle's Land Use Code has instances of both.

In formulating recommendations for code changes, DPD staff reviewed comparable codes from other cities, consulted best practices promoted by policy experts and advocacy organizations, and worked with several stakeholder groups. Below is a summary of the findings:

Other Cities: A review of codes from Chicago, IL, Minneapolis, MN, Madison, WI, Portland, OR and Nashville, TN indicates that most cities are not promoting urban agriculture to the fullest extent possible. Rather than promote urban agriculture throughout an entire city, most cities designate "agricultural districts" located on the periphery of urban areas or parks, or agriculture is permitted as an accessory use on only the largest of city lots (which are usually on the urban periphery). Some cities have a greater emphasis on the urban-rural connection and focus on the distribution of regional farmed goods by promoting farmers' markets rather than cultivation inside city boundaries. Most cities had clearer and more up-to-date definitions of key agricultural uses, which should be addressed in Seattle's code.

Madison, WI provides the best guidance for codes that address agriculture within city boundaries. Agricultural uses are clearly defined, with multiple categories of use. Urban agriculture is generally allowed across the spectrum of their zoning designations including residential, commercial and mixed-use districts, although not necessarily at the scale of the individual residence, and the on-site sale of produce is limited. Madison's code distinguishes between a "market garden," where food can be grown and sold, and a "community garden" where food can be grown for consumption and donation. Market gardens are permitted by an administrative conditional use process, and community gardens are allowed outright.

Best Practices: As interest in promoting healthy eating and growing local food has increased over the years, several organizations, including the American Planning Association (APA), have developed guides or model codes for cities to use. Specifically, APA's Planning Advisory Service (PAS) Report 554: *A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating,* provides excellent references for model zoning codes to promote urban agriculture and improve community food systems. In particular, the PAS recommends providing clear definitions of key terms to avoid any confusion on permitted uses.

Several other sources are citied throughout this Director's Report.

Outreach: From June 2009-January 2010, DPD staff held multiple meetings with local stakeholders to discuss how potential code changes could best accommodate community need. Stakeholders included public health representatives from King County, food system experts from the University of Washington, urban farmers, food policy consultants, architects, and representatives from community groups. In addition to attending meetings stakeholders also provided several rounds of review and comment on draft policy options and code language. Input received from stakeholders helped to create a policy matrix of recommendations, which can serve to guide future policy work (see Appendix A).

In addition to recommendations, one important piece of feedback was the general confusion on the current permitting processes related to urban agriculture. The confusion can be compounded by the different permitting requirements for growing and selling food when it is on private property versus public right-of-way. DPD anticipates developing a new Client Assistance Memo (CAM) pending the outcome of this proposed legislation.

In addition to external stakeholders, DPD staff met with representatives from other City departments to discuss potential impacts to their business practices. This internal stakeholder group included input from Seattle Dept. of Transportation (SDOT), Seattle Public Utilities (SPU), Dept. of Parks and Recreation (PAR), Department of Neighborhoods (DON), and DPD staff with expertise in interpreting, administering, and enforcing city regulations.

RECOMMENDATIONS

The City of Seattle can continue to be a leader in sustainability through a series of relatively simple code changes that will allow urban agriculture to thrive within the City. Based on the analysis of Seattle's regulations, review of best practices, and feedback from stakeholders, DPD recommends the following changes to the Land Use Code:

DPD Recommended Code Changes	
1.	Add definitions for the following key terms: community gardens, including P-Patch community gardens, and urban farms. Refine existing definitions for animal husbandry, aquaculture and horticulture.
Purpose:	Provides clarity for definitions of key terms for regulations that promote community gardens and urban agriculture citywide.
Analysis:	Defining these key terms provides clarity and allows for a better understanding of which uses are allowed by zone. Currently, the Code is limited to definitions of animal husbandry, aquaculture and horticulture, all of which fall under the general term "Agriculture Use." The current definitions are out dated and do not accurately reflect distinctions among contemporary uses or activities. DPD proposes the following updated or new definitions: Agriculture use means any of the following: 1. "Animal husbandry" means a use in which animals are reared or kept in order to sell the animals or their products, such as meat, fur or eggs, but does not include pet daycare centers or animal shelters and kennels. Examples of animal husbandry uses are poultry farms and rabbitries. (updated definition) 2. "Aquaculture" means a use in which food fish, shellfish or other marine foods, aquatic plants, or aquatic animals are cultured or grown in fresh or salt waters in order to sell them or the products they produce. Examples are fish farms and shellfish beds. (updated definition) 3. "Community garden" means a use in which plants are grown and the land managed or used by a public or nonprofit organization, or a group of individuals, to grow and harvest food or ornamental crops for donation or for use by those cultivating the land and their households. Examples include P-Patch community gardens administered by the Department of Neighborhoods. This definition does not include landscaping or gardening that is incidental to a home or business. (new definition) 4. "Horticulture" means a commercial use, other than an urban farm, in which plants, other than aquatic plants, are grown for the sale of them or their products or for use in any business. Other customarily incidental products may be sold onsite as well. Examples include but are not limited to nurseries and greenhouses. (updated definition) 5. "Urban farm" means a use in which plants are grown for sale of the plants or their products at the lot where they are grown and in which no other items are sold. Plants

	or their products may also be sold offsite. Examples include flower and vegetable raising, orchards and vineyards. (new definition) Changes to animal husbandry and aquaculture are relatively minor, and were rewritten for clarity. Community garden and urban farm are two terms that have been added to address the differences between shared gardening space without a commercial component (community gardens), and agriculture that is dedicated to being grown and sold at a particular site. The definition of horticulture has been further refined to differentiate the term from urban farms. Horticulture uses are meant to include nurseries and greenhouses where customarily and incidental agricultural products may be sold onsite.
2.	Allow community gardens outright (including P-Patch community gardens) in all zones, with some limitations in industrial zones.
Purpose:	Promotes community gardens and urban agriculture citywide.
Analysis:	Parks and open space uses are currently permitted outright in all zones and DPD recommends that community gardens and P-Patches be similarly allowed in all zones, with some restrictions in industrial lands. Community gardens function in a similar capacity and would have a similar impact as parks/open space. Like parks/open space, community gardens provide general benefit and recreational opportunities for the community and should be afforded nearly similar use provisions as parks and open space. The exception is in industrial land, where horticulture use is currently not permitted. In order to limit the impacts related to competition for scarce industrial land, DPD recommends that horticulture uses be limited to locations on the rooftops/sides of buildings within designated Manufacturing and Industrial Centers (MICs). This allows for the potential of vertical farming and farming on rooftops, without significantly challenging the use of industrial land for true industrial purposes. (This is further discussed in Recommendation 3.)
3.	Allow urban farms in all zones as follows: Commercial: Allow urban farms outright as a principal or accessory use subject no size-of-use-limits. Horticulture use is currently limited to 10,000 sq. ft. in Neighborhood Commercial 1 (NC1) zones and 25,000 sq. ft. in NC2 zones; there are no size-of-use limits in NC3 or Commercial (C) zones. There is no proposed change to the size-of-use limits for horticulture use. Industrial: Allow urban farms outright as a principal or accessory use outside of designated Manufacturing Industrial Centers (MIC), and on tops and sides of buildings as an accessory use in all industrial zones. Residential: Allow urban farms outright as an accessory use up to 4,000 sq. ft. with no land use permit required. Allow urban farms greater than 4,000 sq. ft. as an accessory use subject to an administrative conditional use permit process

	(conditions are described below).
Purpose:	To increase the amount of healthy, locally produced food; to provide greater food security; to reduce greenhouse gas impacts from transportation of food; and, to allow for small-scale economic development opportunities.
Analysis:	The following analysis is predicated on the change in definitions found in recommendation 1 of this table. Refining/adding definitions for urban farms, horticulture and community gardens allows for additional control in limiting potential impacts from agricultural uses where permitted. <u>Commercial Zones</u> In commercial zones horticultural use is currently allowed and there is no proposal to change the current use provisions, including the size of use limitations of 10,000 sq. ft. in NC1 zones and 25,000 sq. ft. in NC2 zones. Horticulture use is more likely to have large structures associated with them (greenhouses, nurseries), with plants and other customarily incidental products for sale. The intent of the size of use restrictions is to limit retail space to better fit in with neighborhood character. Urban farms are associated with actual land used for growing and selling plants. Although greenhouses can be incorporated into their use, it is primarily about using the land for farming, as only what is grown on-site can be sold on-site. Therefore, DPD is recommending no size-of-use restrictions for urban farms. Any development of an urban farm over 4,000 sq. ft. will trigger environmental review pursuant to SEPA. The SEPA process is sufficient to identify potential impacts, and condition a project as necessary. <u>Industrial Zones</u> In industrial zones, Horticulture use is currently not allowed. Given the intense competition for relatively inexpensive industrial land and the City's stated policy to protect industrial land for industrial jobs, DPD's recommendations to expand urban agriculture in industrial zones are limited. Urban farms/agriculture would not be permitted as a use inside designated MICs, unless the endeavor is confined to a rooftop or to vertical farming. Allowing rooftop gardens on top of industrial buildings is logical, given the popularity of green roofs and the potential amount of space for rooftop gardens in industrial zones. However, urban farms would be allowed on industrial zoned land that is outside the boundaries of designated MICs. The Comprehensive Plan states that General Industrial (IG, or heavy industrial) zones are most appropriately located in designated MICs, which is where urban agriculture could come into conflict with the City's policy of preserving industrial land for industrial jobs. However, outside of MICs and in the less intensive Industrial Buffer (IB) and Industrial Commercial (IC) zones, urban agriculture could be more compatible with commercial operations or office buildings that are typical of IB and IC zones. For obvious reasons soil testing for contaminants is recommended (but would not be required by the Land Use Code), and there are farming techniques that make agricultural uses on former industrial sites possible and productive.

Residential Zones

Perhaps the greatest potential for increase in productive agriculture land is within the city's residential zones. Traditionally, residential zones are where people live rather than work; however, the code currently allows outright a number of commercial and institutional uses in residential zones. These include public schools, home occupations, day care centers, nursing homes and adult family homes.

In order to keep urban farming at a manageable scale and to limit impacts, urban farms will be permitted outright as an accessory use up to 4,000 sq. ft, without a separate use permit. Unlike community gardens, urban farms incorporate a modest commercial element, allowing produce to be both grown and sold onsite. Home occupations set a precedent for allowing commercial elements in residential zones, but they are limited to the interior of a dwelling unit. Most residential lots, particularly in single-family zones, have home gardens and/or ornamental landscaping that for obvious reasons cannot be restricted to indoor space. Allowing urban farms in residential zones is a natural combination of two elements, home occupations and gardening, that are already occurring where people live.

Residents may be particularly sensitive to perceived impacts from urban farms, including odor, traffic, on-site visitors and visual impacts. Although DPD considers urban agriculture uses to be highly compatible with residential uses, there is a minor potential for conflicts, based largely on perceived impacts from urban farms. This is not unlike home occupations, where there may be the perception of impacts, but homeowners are still allowed to use their homes for commercial uses (home offices, day cares, craftwork, etc.) that are compatible with residential uses.

Home occupations are subject to standards that are intended to limit potential impacts to neighbors. For consistency, DPD is proposing the following minimum requirements for all urban farms in residential zones:

1. Only mechanical equipment designed for household use may be used.
2. Retail sales and all other public use of the farm shall end by 7:00 p.m. every day of the week.
3. Commercial deliveries and pickups are limited to one per day. On-site sales are not considered commercial pickups.
4. No more than two motor vehicles, each with a gross vehicle weight of 10,000 pounds or less may be used for farm operations.
5. The farm shall be located on the same lot as the principal use to which it is accessory or on a lot where the planting area is within 800 feet of lot where the principal use is located.
6. Identification signs are permitted, no greater than 64 sq. inches, illuminated or non-illuminated. This is the same standards for bed and breakfast uses in multifamily zones.
7. Lots with no principal structure are limited to accessory structures for urban farm use that may not exceed a total gross floor area of 1,000 square feet, 12 feet in height, and are otherwise subject to the development standards of the zone.

These requirements are believed to be reasonable to limit the impacts of urban farms in residential zones and allow adequate room for growing and selling produce. Like home occupations there are proposed limits to visitors (both vehicle trips and actual visitors), as well as provisions to limit impacts from noise, odor and visual impacts.

The larger the urban farm, the more potential for impacts to surrounding neighbors. It is possible that larger urban farms could allow for better screening from neighbors, or might not directly abut another residence. But larger planting areas could increase the amount of resources used (water, soil), and lead to more ground disturbance, runoff and erosion. DPD recommends that urban farms over 4,000 sq. ft. be required to obtain an Administrative Conditional Use (ACU) permit, subject to conditions for allowing them in residential zones.

As part of the ACU permit, applicants for larger urban farms would be required to submit a farm management plan that addresses any probable impacts and includes any proposed mitigation measures. The plan shall include, without limitation:

1. A site plan.
2. The type of equipment necessary or intended for use in each season and the frequency and duration of anticipated use.
3. Disclosure of any intent to spray or otherwise apply agricultural chemicals or pesticides, frequency and duration of application, and the plants, diseases, pests or other purposes they are intended for.
4. Disclosure of whether the operation of the farm would involve 750 square feet or more of land-disturbing activity, or would otherwise require drainage approval under Chapter 22.800.
5. A proposed sediment and erosion control plan.

Given the larger individual lot sizes, single-family zones have the greatest opportunity for urban farms of both sizes. The breakdown of lot size in single-family zones is as follows:

Total Single-Family Parcels = 126,198
Average Lot Size = 6,400 sq. ft
Lots Between 5,000-10,000 sq. ft = 68,607
Lots Over 10,000 sq. ft = 9,216
Lots Zoned SF 7200* = 24,829
Lots Zoned SF 9600 = 2,385

*Single Family 7200 (SF 7200) is a single-family zone designation with a minimum lot size of 7,200 square feet.

Beyond quantifying the number of lots that may be eligible to add an urban farm, it's difficult to predict the number that will actually occur. In addition to sufficient space, a successful urban farm would need to have adequate light, soil conditions, and an operator who possesses the desire and knowledge to grow enough produce to support a small commercial operation. Although predicting the number of potential urban farms is difficult, the National Gardening Association provides some recent statistics that indicate that the

	interest level in food gardening is on the rise:[xi] • 43 million U.S. households grew their own fruits, vegetables, berries and herbs in 2009; up 19 percent from 2008. • The median food garden size is 96 sq. ft. and the average food garden size is 600 sq. ft. • Only 6% of food gardens were greater than 2,000 sq. ft. • 23% of gardeners surveyed grow food to share with others. 22% grow food to live more locally. In addition to Seattle's land use regulations, in some circumstances urban farms may be subject to additional state or county regulations. Upon adoption of this legislation DPD will provide a Client Assistance Memo (CAM) that will include an overview of additional regulations related to growing and selling food.
4.	Allow rooftop greenhouses a 15' exception to height limits as a rooftop feature, if the greenhouse is dedicated to food production in MF/C/I/Seattle Mixed/Downtown zones.
Purpose:	To provide an incentive for new development to increase the amount of locally produced agriculture; to reduce local food insecurity; and, to reduce greenhouse gas impacts from transportation of food.
Analysis:	Other rooftop features including solar panels, play equipment, mechanical equipment, and communication utilities, are allowed to extend above required height limits (15 feet above in commercial zones). However, in most zones the rooftop area that can extend above the height limit is limited to a percentage of the roof area (20% in commercial zones). DPD proposes that greenhouses dedicated to food production be allowed to extend 15 feet above the height limit of a zone, up to maximum permitted rooftop coverage of 50%. A greater allowance for the use of roof area helps ensure that this otherwise wasted space can be dedicated to food production. Meaningful food production requires space, both in terms of area for planting, and also room to locate a greenhouse in the ideal location to maximize sun exposure. A 15-foot height allowance for greenhouses allows for the use of a stacked hydroponics growing system in addition to the traditional single-tier, flat growing beds. If the idea is to encourage commercial growing, then the City needs to make allowances for newer technical options related to agriculture in the built environment. A 15-foot height limit would also allow a longer span, single-slope greenhouse, increasing options for greenhouse use. Protecting solar access for adjacent properties is also important. Although greenhouses are generally transparent they may have a shading impact on adjacent properties. Therefore, any proposed greenhouse must adhere to setbacks from a north facing façade to protect solar access to adjacent property. Another concern is that there may be an impact to views from surrounding property. The Land Use Code currently allows many rooftop features that have similar impacts on views,

	but are limited in area. Rooftop greenhouses would only be permitted to exceed height limits if they are dedicated to food production, and the policy objective of providing more opportunity for access to local produce is fairly balanced in the proposal with standards to mitigate view impacts.
5.	Add farmers' markets to the definition of multipurpose uses.
Purpose:	Provides a definition of farmers' markets and provides guidance for where farmers' markets would be allowed.
Analysis:	Clearly identifying farmers' markets as a multipurpose would allow farmers' markets outright in NC and C zones, subject to the current size-of-use restrictions in NC1 (10,000 sq. ft.) and NC2 (50,000 sq. ft.) zones. As with grocery stores, farmers' markets would not be allowed outright in residential and industrial zones. However, somebody interested in having a farmers' market in either of these zones, without any permanent structure, could apply for a temporary use permit. Beyond identifying them as multipurpose retail, DPD does not recommend an explicit definition for farmers' markets as part of this legislative proposal, but recommends further work on the issue. Trying to define farmers' markets can be complicated in Seattle, because some of the markets that are generally perceived to be farmers' markets sell many things other than food. The Office of Economic Development (OED) is currently administering a pilot program for farmers' market permitting with an extensive definition for farmers' markets that requires that a minimum of 70% of a market's vendors are Washington State farms and businesses selling items from the following five categories: fresh farm products, value added farm foods, dried flowers/crafted farm products, processed food and prepared foods. Based on feedback from OED's pilot program, further defining the term farmers' markets may be possible as part of future food policy work. It is important to note that clarifying the term does not impact the environmental review process, which can be triggered depending on the size of the market. On private property, SEPA is triggered for markets over 4,000 sq. ft, but if a farmers' market is located on designated right-of-way there is no trigger for environmental review.
6.	Increase the number of domestic fowl allowed (chickens, turkeys, ducks, geese, etc.) per lot, and prohibit roosters.
Purpose:	To allow for a reasonable increase in egg production for chicken owners.
Analysis:	Current code allows up to three domestic fowl per lot in addition to the small animals that are allowed. Additionally, for each 1,000 sq. ft. of lot that is in excess of the minimum lot area for the zone (or in excess of 5,000 sq. ft, where there is no minimum lot area), one additional domestic fowl is allowed. Research, and feedback from stakeholders, indicates that the allowance for only three chickens simply isn't enough to provide consistent egg production to meet needs. On the average, three hens will produce two eggs a day, but the amount of eggs produced is truly dependent on seasonal influences, and the age and overall

	health of the hen. DPD recommends increasing the number of allowable domestic fowl to eight per lot, and keeping the provision for an additional domestic fowl per 1,000 sq. ft of lot in excess of the minimum lot size. This would allow for an average family to be reasonably well-provided with eggs, despite the specific laying patterns for each individual hen. In addition, to correct an omission in the current Code, roosters would be prohibited.
7.	Allow existing urban horse farms greater than ten acres to operate as a permitted use in residential zones.
Purpose:	To preserve a unique urban agricultural resource within Seattle.
Potential Impacts:	There are only three operating horse farms in Seattle. Of these, two are privately owned; one in Rainier Beach is approximately 20 acres, and another in West Seattle is approximately 2 acres. A third is a 3 acre stable located in Watercrest Park and operated by the Seattle Police Department. The proposed Code change applies to only one of the farms; a truly unique 20 acre farm in an urban area. As comparison, Marra Farm, a model urban farm which is part of Seattle Parks and Recreation, is only 4 acres. Unlike the other two horse operations, the farm in Rainier Beach is relatively isolated, with only one house adjacent to the property so there are almost no impacts to the surrounding neighbors. There are two or three single-family homes adjacent to the farm, to the north and east of the property boundaries. To the south and west of the property there are critical area slopes that inhibit any future development both because of the steepness of the slopes and lack of access. The proposed Code change would allow for modest commercial operation (riding lessons, etc.) that would support the farm and allow for future urban agriculture activities that by themselves would not sustain this unique operation. Allowing an urban farm the opportunity for additional buildings to support their farm does not allow for an increase in the number of animals that are permitted to be kept onsite; in other words, animal husbandry regulations will not change. Animal husbandry is governed by SMC 23.42.052, which states that farm animals such as cows, horses, sheep and other similar farm animals are permitted only on lots of at least 20,000 sq. ft. Lots meeting that requirement are allowed one farm animal for every 10,000 sq. ft. of lot area. In addition, farm animals and structures housing them must be kept at least 50 feet from any lot in a residential zone. Any buildings constructed to support a horse farm would still be required to meet development standards for a residential zone. In a single-family zone, any new building would be limited to 35% lot coverage and 30 feet in height if it is not located in a required yard. Depending on size and location, any new development could be subject to environmental (SEPA) review and possible mitigation for impacts.

CONCLUSION

Urban agriculture is a missing element of Seattle's neighborhoods, and is a key component in creating more sustainable communities and stimulating small-scale economic development. These recommendations serve as an important first step toward creating a more secure and sustainable food system in Seattle by removing code barriers to urban agriculture and identifying incentives to produce and distribute more locally grown food. These changes underscore the value and importance of City government doing all it can do to foster a local, secure, and sustainable food network, and highlight Seattle as a forward-thinking and responsible leader nationally/internationally for sustainable development and social equity.

ENDNOTES

[i] Samina Raja, Branden Born, and Jessica Kozlowski Russell, "A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Healthy Eating," *APA Planning Advisory Service* Report Number 554 (2008).

[ii] Jamie Thomas and Colin Drukker, "Returning to Their Roots: A look at how scalable agriculture can create more sustainable suburban communities," *Urban Land* (Spring 2009).

[iii] 2006 Steven Garett," Sound Food Report: Enhancing Seattle's Food System," a report to The City of Seattle, June 20, 2006. Available at: faculty.washington.edu/bborn/Sound_Food_Report2.pdf.

[iv] Recommended Community Strategies and Measurements to Prevent Obesity in the United States.

[v] Katherine Houston Brown and Anne Carter, "Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe," Prepared by the North American Urban Agriculture Committee of the Community Food Security Coalition, available at: www.foodsecurity.org.

[vi] Thomas and Drukker, *Urban Land* (Spring 2009).

[vii] Alex Wilson, "Growling Food Locally: Integrating Agriculture Into the Built Environment, *Environmental Building News,* Volume 18 Number 2 (2009).

[viii] Beth Daly, "Lead May Lurk in Backyard Gardens," *Boston Globe*, August 11, 2008. Accessed: http://www.boston.com/news/science/articles/2008/08/11/lead_may_lurk_in_backyard_gardens/

[ix] Robert M. Pederson and Aileen Robertson, "Food Policies are Essential for Healthy Cities," *Urban Agriculture Magazine* (March 2001). Available at www.ruaf.org.

[x] Pederson and Robertson, *Urban Agriculture Magazine* (March 2001).

[xi] Bruce Butterfield, "The Impact of Home and Community Gardening in America," research conducted by The National Gardening Association (2009). Available at www.gardenresearch.com.